

**IN THE CLAIMS:**

Please amend claims 1, 4, 7, 10, 13, 14, 15 and 17, cancel claims 3, 9 and 16, and add new claims 25 and 26.

This listing of claims will replace all prior versions, and listings of the claims in the application.

**Listing of the claims**

1. **(Currently Amended)** A composition comprising:  
an isolated nucleic acid molecule that encodes an immunogen, wherein said immunogen is a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases; and  
an isolated nucleic acid molecule that encodes one or more proteins of selected from the group consisting of: Fos, c-jun, Sp-1, Ap-1, Ap-2, p38, p65Rel, MyD88, IRAK, TRAF6, IkB, Inactive NIK, SAP K, SAP-1, JNK, interferon response genes, NFkB, Bax, TRAIL, TRAILrec, TRAILrecDRC5, TRAIL-R3, TRAIL-R4, RANK, RANK LIGAND, O~~x~~40, O~~x~~40-LIGAND, NKG2D, MICA, MICB, NKG2A, NKG2B, NKG2C, NKG2E, NKG2F, TAP1, TAP2 and functional fragments thereof  
wherein nucleic acid sequences that encode the immunogen occur on a separate nucleic acid molecules from nucleic acid sequences that encode one or more immunomodulatory proteins.
2. **(Original)** The composition of claim 1 wherein said nucleic acid molecules are plasmids.
3. **(Canceled)**

4. (Currently amended) The composition of claim 3 1 wherein said immunogen is a pathogen antigen.

5. (Original) The composition of claim 4 wherein said immunogen is a herpes simplex antigen.

6. (Original) The composition of claim 5 wherein said herpes simplex antigen is HSV2gD.

7. (Currently amended) A composition comprising an isolated nucleic acid molecule comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements, wherein said immunogen is a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases; and in combination with a separate nucleotide sequence that encodes one or more immunomodulating proteins of operably linked to regulatory elements, wherein said immunomodulating proteins are selected from the group consisting of: Fos, c-jun, Sp-I, Ap-1, Ap-2, p38, p65Rel, MyD88, IRAK, TRAF6, IkB, Inactive NIK, SAP K, SAP-1, INK, interferon response genes, NFkB, Bax, TRAIL, TRAILrec, TRAILrecDRC5, TRAIL-R3, TRAIL-R4, RANK, RANK LIGAND, Ox40, Ox40 LIGAND, NKG2D, MICA, MICB, NKG2A, NKG2B, NKG2C, NKG2E, NKG2F, TAP1, TAP2 and functional fragments thereof.

8. (Original) The composition of claim 7 wherein said nucleic acid molecule is a plasmid.

9. (Canceled)

10. (Currently amended) The composition of claim 9 7 wherein said immunogen is a pathogen antigen.

11. (Original) The composition of claim 10 wherein said immunogen is a herpes simplex antigen.

12. (Original) The composition of claim 11 wherein said herpes simplex antigen is HSV2gD.

13. (Currently amended) An injectable pharmaceutical composition comprising the composition of ~~claims~~ claim 1.

14. (Currently amended) A method of inducing an immune response in an individual against an immunogen comprising administering to said individual a composition of ~~claims~~ claim 1.

15. (Currently amended) A recombinant vaccine comprising a nucleotide sequence that encodes an immunogen operably linked to regulatory elements, wherein said immunogen is a pathogen antigen, a cancer-associated antigen or an antigen linked to cells associated with autoimmune diseases; and in combination with a separate, a nucleotide sequence that encodes one or more immunomodulating proteins of operably linked to regulatory elements, wherein said immunomodulating proteins are selected from the group consisting of: Fos, c-jun, Sp-1, Ap-1, Ap-2, p38, p65Rel, MyD88, IRAK, TRAF6, Ikb, Inactive NIK, SAP K, SAP-1, JNK, interferon response genes, NFkB, Bax, TRAIL, TRAILrec, TRAILrecDRC5, TRAIL-R3, TRAIL-R4, RANK, RANK LIGAND, Ox40, Ox40 LIGAND, NKG2D, MICA, MICB, NKG2A, NKG2B, NKG2C, NKG2E, NKG2F, TAP1, TAP2 and functional fragments thereof.

16. (Canceled)

17. **(Currently amended)** The recombinant vaccine of claim 16 15 wherein said immunogen is a pathogen antigen.
18. **(Original)** The recombinant vaccine of claim 17 wherein said recombinant vaccine is a recombinant vaccinia vaccine.
19. **(Original)** A method of inducing an immune response in an individual against an immunogen comprising administering to said individual a recombinant vaccine of claim 17.
20. – 21. **Canceled.**
22. **(Previously presented)** The composition of claim 1 wherein the isolated nucleic acid molecule that encodes one or more proteins encodes Ox40 or a functional fragment thereof..
23. **(Previously presented)** The composition of claim 7 wherein the isolated nucleic acid that encodes one or more proteins encodes Ox40 or a functional fragment thereof.
24. **(Previously presented)** The recombinant vaccine of claim 15 wherein the nucleotide sequence that encodes one or more proteins encode Ox40 or a functional fragment thereof.
25. **(New)** An injectable pharmaceutical composition comprising the composition of claim 7.
26. **(New)** A method of inducing an immune response in an individual against an immunogen comprising administering to said individual a composition of claim 7.